

PATENT CLAIMS

1. Apparatus for monitoring a measurement transmitter (2) of a field device (1) determining and/or monitoring a physical and/or chemical process parameter,
5 wherein at least one sensor (8) is provided in the housing for determining the temperature and relative humidity in the housing (11) over a period of time in predetermined intervals,
wherein a control-/evaluation-unit (7) is provided,
10 which, on the basis of the measured temperature and relative humidity, determines the absolute humidity and/or dewpoint in the housing (11) of the transmitter (2), and issues an alarm when the absolute humidity and/or dewpoint in the housing (11) of the transmitter
15 (2) reaches a critical value.
2. Apparatus as claimed in Claim 1,
wherein the sensor (8) for measuring temperature and relative humidity is an SMD-semiconductor-sensor.
3. Apparatus as claimed in Claim 1 or 2,
20 wherein a memory unit (10) is provided, in which a point, or range, of operation for the temperature is predetermined.
4. Apparatus as claimed in Claim 1, 2, or 3,
25 wherein an input unit (12) is provided, by means of which the point, or range, of operation for the temperature can be entered.
5. Apparatus as claimed in Claim 1,
that the control-/evaluation-unit (7) sets the critical value, such that, in the case of the lowest possible
30 operating temperature, no condensate forms in the housing (11).

6. Apparatus as claimed in Claim 1 or 5,
wherein the control-/evaluation-unit (7) sets an alarm
when a predetermined tolerance-value near the critical
value is reached or exceeded.

5 7. Apparatus as claimed in Claim 6,
wherein the control-/evaluation-unit (7), on the basis
of historical information, issues information on when
the critical value is predicted to be reached.